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After the death of the animals, and their bodies and tubes have macerated from the surface of the polypidom, their bases upon the areolæ of attachment have an irregular stellate or lobate appearance, which penetrate in a convergent manner to the nuclear twig or branch. The decaying mass has a strong odor in a remarkable degree like that of putrid fish.

The animal is not so irritable as *Plumatella*, but is like it capable of entirely retracting within its tube, in which state the stomach appears transversely wrinkled.

The ova as they are detached from the mass rise near, or to the surface of the water and float.

There is probably some confusion existing in the distinction of the genera *Cristatella* and *Alcyonella*, as characterized by Cuvier, Lamarck, Allman, &c., but, if correct, then *C. magnifica* would belong to a new genus between *Cristatella*, *Cuv.*, and *Alcyonella*, *Lam.*, for while the polyp and its ovum correspond to the former, the polypidom corresponds to the latter. Should it prove distinct I propose for it the name *Pectinatella*.

Dr. Leidy further stated as follows :

The female *Gordius*, which he had mentioned at the last evening as having extruded from September 25th up to that time a cord of ova 49 inches in length, had continued the process until Sunday evening, October 7th, up to which time it had expelled in fragments from a few lines to one foot in length, in all a cord 91 inches long, in which he estimated there were over 6,000,000 ova. Dr. L. exhibited the cord of ova preserved in alcohol, which was long and white and resembled a piece of cotton thread.

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*September 23d.*

Vice President BRIDGES in the Chair.

A letter was read from the Linnean Society of London, dated June 5th, 1851, acknowledging the receipt of numbers 6 and 7, Vol. 5, of the Proceedings of the Academy.

Dr. McEuen exhibited a specimen of the fruit of *Paullownia imperialis*, from the garden of Mrs. J. B. Smith of this city.

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*September 30th.*

Vice President BRIDGES in the Chair.

The committee to which was referred the continuation of Dr. Le Conte's paper on the Longicorn Coleoptera of the United States, reported in favor of publication in the Journal.

The committee to which was referred Mr. J. D. Dana's paper, read 16th inst., reported in favor of publication in the Proceedings.

*Conspectus Crustaceorum quæ in Orbis Terrarum circumnavigatione, Carolo Wilkes e classe Reipublicæ Fœderatæ Duce, lexit et descripsit J. D. DANA.*

#### PAGURIDEA.

The Pagurideæ include two groups, distinguished by peculiarities in the form of the inner antenna, outer maxillipeds, and some other characteristics;—the one *aquatic* in habit, and the other *subterrestrial*. They are as follows:

Fam. I. PAGURIDÆ.—Inner antennæ short, first joint very short. Palpus of maxillipeds with a multi-articulate flagellum. Aquatic or littoral.

Fam. II. CENOBITIDÆ.—Inner antennæ very long, the first joint of the base as long as the eyes or longer, and bent obliquely downward. Palpus of outer maxillipeds without a flagellum. Subterrestrial.

The Paguridæ have hitherto been divided into but two genera; *Pagurus*, with unsymmetrical abdomen, and *Cancellus*, (Edw.) with symmetrical. There are, however, important characteristics, which point to a division into other groups. These have been partly indicated by Milne Edwards, in the subdivisions of the genus *Pagurus*, laid down in his work on Crustacea,\* and more distinctly in the *Annales des Sciences Naturelles*, for July, 1848.† In the latter article there are discrepancies in certain instances, between the character of the species and those mentioned for the subdivisions, which we find it difficult to reconcile; such as the placing of *P. tibicen*, and some related species, with his “*Æquimanes*,” when, in fact, the left hand is very much larger than the right, and the *guttatus* and *granulatus* with the “*Senestres*,” although, in the former, the hands are nearly equal, as in many of the “*Æquimanes*,” and in the latter the right hand (as is observed in his “*Crustacés*”) is actually the larger. Yet his sections are, in the main, natural groups, and some of them have more important points of distinction than he has mentioned.

The *Pagurus Bernhardus* is the type of one of these groups. Besides being “*dextres*,” they are peculiar in having *acuminate fingers*, with the tips of those of the larger hand *calcareous*; and although the feet of the 4th pair are subcheliform, like most other Paguridæ, the scabrous area or rasp of the hand is confined nearly to the posterior edge. Moreover, the species belong mainly to colder waters, while the ordinary Paguri abound especially in the tropics. All the Paguri of England (or with but one uncertain exception, recently pointed out,) are of the *Bernhardus* type; those of the Northwest coast of America are the same. We naturally, therefore, distinguish this group as a genus under the name of BERNHARDUS.

Among the remaining Paguri, the larger part have the feet of the 4th pair subcheliform, the penult joint being broad, and the last (or tarsus) forming a finger placed on its anterior margin. Yet, a few have these feet vergiform, the tarsus being terminal; and these species are also peculiar, in having two pairs of slender appendages at the base of the abdomen, on account of which they are called the “*Pagures appendicules*” by Edwards. Besides, they have the flagellum of the outer antennæ more or less hairy, and often long ciliate along the under side, and, also, the inner antennæ have a longer base than usual, the 2d basal joint reaching nearly, or quite, to the extremity of the

\* Crustacés, ii., 223, and *Annales des Sci.* [2], vi., 257.

† *Ann. des Sci. Nat.* [3], x., 59.

eyes. These species make a well characterized group, which we name *Paguristes*.

Another small group is singular in having a rostriform appendage to the ophthalmic joint; they are the "Pagures armés" of Edwards, including *P. miles* and *P. custos*, the former the *Cancer Diogenes* of Herbst. Besides this distinction, the fingers of the hands are acuminate, as in the Bernhardi, and have calcareous tips, although the species are not right-handed; also, the 2d joint of the outer antennæ is complete on the upper side, and there is no moveable appendage or acicle (a name we give to the so-called palpus, in allusion to its form). With these distinctions, the group is entitled to the rank of a genus, which may be named *Diogenes*.

The remaining species of Paguri are similar, in having the fingers of the hands more or less spoon-shaped;—with no rostriform appendage to the ophthalmic segment between the eyes;—the outer antennæ bearing a moveable acicle;—the flagellum of the outer antennæ naked; the 2d joint of the base of the inner antennæ not reaching to extremity of eyes; the feet of the 4th pair subcheliform with the scabrous area on the hand, lateral and broad.

The great majority of these have the tips of all the fingers corneous. But a few have these tips in the larger hand calcareous, besides being peculiarly smooth and neat in the appearance of the limbs, and naked, or nearly so, with the shell more calcareous than usual. They have the left hand much the larger; yet unlike those species with *corneous* tips to the fingers that are strongly left-handed, the front margin has a small salient point at middle. Of the species with calcareous tips to the fingers, I make the genus *Calcinus*. This genus includes the old species *P. tibicen*, *Gaimardii*, *elegans*, &c.

The remaining species, still the larger part of the whole family, constitute the genus *Pagurus*. The following is a synopsis of the subdivisions proposed.

#### FAM. I. PAGURIDÆ.

Antennæ internæ mediocres, articulo primo brevissimo. Maxillipedis palpus externi flagello multi-articulato instructus. Species aquaticæ vel littorales.

Subfam. I. PAGURINÆ.—Abdomen symmetricum.

I. Pedes 4ti subcheliformes. Abdomen ad basin duobus paribus appendicium infra non instructum. Antennarum externarum flagellum nudum vel nudiusculum.

1. *Annulum ophthalmicum non rostriferum. Antennæ internæ aciculo mobili instructæ.*

Gen. 1. BERNHARDUS, D.—Pedes antici depressi; digiti acuminati; manus dextra major, apicibus digitorum calcarea. Macula scabra manus 4tæ submarginalis, linearis.

Gen. 2. PAGURUS, *Fabr.*—Manus anticæ sive depressæ sive compressæ; digiti plus minusve instar cochlearis excavati, apicibus cornei; manus sinistra sæpius major. Macula scabra manus 4tæ lateralis lata.

Frons medio sive truncatus sive acutus.

Gen. 2. CALCINUS, D.—Manus compressæ, sinistra major, apicibus digitorum calcarea et instar cochlearis optime excavata. Frons medio acutus.

Pedes læves, nudi vel nudiusculi.

2. *Annulum ophthalmicum rostriferum. Antennæ externæ aciculo mobili non instructæ.*

Gen. 4. *DIODES*, D.—Manus sinistra major. Digiti acuminati, apicibus calcarei.

II. Pedes 4ti vergiformes, tarso terminali. Abdomen ad basin 4 appendicibus infra instructum. Antennarum flagellum externarum plus minusve pilosum sæpe elongatè ciliatum.

Gen. 5. *PAGURISTES*, D.—Antennæ internæ elongatæ, apice articuli 2di extremitatem oculorum fere attingente.

Subfam. II. *CANCELLINÆ*.—Abdomen symmetricum. Gen. *CANCELLUS*, *Edw.*

#### FAM. II. CENOBITIDÆ.

Antennæ internæ basi longissimæ, articulo primo oculis sæpe longiore et valde deflexo. Maxillipedis palpus externi flagello non instructus. Species subterrestiales.

Gen. 1. *CENOBITA*, *Edw.*—Corpus angustum, carapace parce elongato, fronte non rostrato. Abdomen in cochleam retortum, superficie plerumque carnosum.

Gen. 2. *BIRGUS*, *Leach.*—Corpus latum, carapace parce oblongo, postice latissimo, fronte triangulato. Abdomen directum, inflexum, laminis crustaceis quoad dorsum plerumque tectum.

Specierum Paguridearum adhuc ineditarum Descriptiones.

#### GENUS BERNHARDUS.

*BERNHARDUS NOVI-ZEALANDIÆ*.—Oculorum pedunculi margine carapacis antico vix breviores, basi antennarum externarum longiores, aciculo hirsuto multo longiores; cornea non obliqua, perbrevis; squama basalis paulo angusta, apice inciso-denticulata. Pedes antiqui valde inæqui, fere nudi; carpo versus apicem paulo pubescens, granulato-spinuloso; manu grandi, oblongâ, parce longiore non latiore quam carpus, superficie externâ sex-seriatim tuberculatâ (marginibus inclusis) inter has series fere lævi, digito mobili carinato, crenulato et superficie uniseriatim tuberculato, etiam tuberculus minoribus instructo. Pedes 4 sequentes marginibus dense hirsuti, vix spinulosi.

*Long.*  $1\frac{1}{2}$ —2''. *Hab.* in portu "Bay of Islands" Novi-Zelandiæ.

*BERNHARDUS TENUIMANUS*.—Frons medio subacutus. Carapax nudus. Oculorum pedunculi breves, basi antennarum externarum paulo breviores, aciculo subulato subnudo vix breviores; cornea non obliqua, brevis; squama basalis angusta, acuta. Pedes toti nudi, antiqui valde inæqui, granulati, granulis vix seriatim, carpi margine superiore denticulato, manu grandi tenuissimè compressâ, parce oblonga, multo latiore quam carpus, margine superiore tenuiter cristato et denticulato, inferiore tenui; manu minore carpoque angustissimè oblongis. Pedes 4 sequentes lateraliter læves, margine superno subspinulosi.

*Long.*  $1-1\frac{1}{4}$ ''. *Hab.* in freto "Puget" Oregonensi.

BERNHARDUS ARMATUS.—Carapax subnudus. Oculorum pedunculi margine carapacis antico breviores, sive basi sive aciculo subulato subnudo antennarum externarum multo breviores; cornea obliqua, dimidii pedunculi longitudine; squama basalis subovata, apiculata. Frons marginatus, medio paulo saliens, obtusus. Pedes toti fere nudi (junioribus exceptis pubescentioribus); antici valde inæqui, usque ad digitorum extremitatem tenuiter dense spinosi, spinis partim subseriatis, manu grandi latâ, oblongâ, multo longiore et parce latiore quam carpus; 4 sequentes supra spinulosi, tarsi infra paulo lateraliter uniserialiter spinulosi.

*Long.*  $1\frac{3}{4}''$ . *Hab.* in freto "Puget" Oregonensi.

BERNHARDUS HIRsutiusculus.—Frons medio subactus. Carapax brevis, sparsim pubescens, regione antico transverso. Oculorum pedunculi perbreves, basi antennarum externarum multo breviores, aciculo subnudo parce breviores; cornea vix obliqua; squama basalis ovata, non acuta. Pedes antici valde inæqui, angusti, carpo manuque pubescentes et granulato-scabri, margine superiore crassi, non spinulosi nec denticulati; manu oblongâ (duplo longiore quam latitudo) paulo brevior parce latiore quam carpus. Pedes 4 sequentes hirsutiusculi, non spinulosi, tarsi paulo compressis, infra subtiliter spinulosi.

*Long.*  $1\frac{1}{4}''$ . *Hab.* in freto "Puget" Oregonensi.

BERNHARDUS PUBESCENS.—*B. hirsutiusculo* affinis. Frons medio subacutus. Carapax longior, fere nudus, regione antico non transverso. Oculorum pedunculi longi, margine carapis antico non breviores, basi antennarum externarum parce longiores, aciculo multo longiores; cornea non obliqua; squama basalis subovata, apice rotundata. Pedes antici valde inæqui, angusti, carpo manuque pubescentes, scabriculi, non sparsim granulati, carpo ad marginem superiorem minute spinuloso manu oblongâ (duplo longiore quam latitudo) paulo brevior parce latiore quam carpus. Pedes 4 sequentes pubescentes, non spinulosi.

*Long.*  $1''$ . *Hab.* ? Conchæ quas habitant oris Americæ septentrionalis inveniuntur.

#### GENUS PAGURUS.

##### 1. *Frons medio truncatus. Squama oculorum basalis lata.*

PAGURUS FABIMANUS.—Frons medio fere rectus. Carapax plerumque nudus regione antico parce transverso. Oculi longiusculi, basi antennarum longiores; squama basalis lata, inverso-triangulata. Pedes antici valde inæqui, manu majore oblongâ, marginibus fere parallelis et subacutis, superiore spinuloso, inferiore crenulato aut subintegro, superficie externâ bene convexâ, tomentosâ, scabriculâ, digiti mobili superne fere ad apicem minute spinuloso. Pedes 4 sequentes leviter hirsuti, tarsi prælongis, tarso pedis sinistri tertii subtriangulo, superficie hujus articuli præcedentisque externâ aut planâ aut subconcavâ, tomentosâ, margine superiore non spinuloso.

*Long.*  $1\frac{1}{2}''$ . *Hab.* ad oras insulæ "Mindanao" Indiæ orientalis.

PAGURUS SCABRIMANUS.—*P. fabimano* fermè affinis, formâ carapacis, manus squamæque oculorum basalis similis. Oculi parce breviores, basi antennarum externarum longiores, internarum non longiores. Manus major extus non tomentosa, nudiuscula, scabricula, supra spinulosa, infra denticulata, aut crenulata, digito mobili supra vix spinuloso, carpo supra extusque prope apicem

spinuloso. Pedes 4 sequentes leviter hirsuti, tarsis prælongis, tarso pedis sinistri 3tii non subtriquetro, superficie externâ nec planâ, nec tomentosâ, margine superiore minute spinuloso.

*Long.* 1—1½''. *Hab.* ad oras insulæ "Mindanao."

2. *Frons medio subacutus. Squama oculorum basalis sæpius angusta.*

PAGURUS ÆQUABILIS.—*P. lineato* ferme affinis, manibus æquis, hirsutis, breviter spinulosis, formâ frontis oculique simili. Pedes 2di 3tiique parce hirsutiusculi, superficie externâ nudâ, articulis latioribus, fere lævibus, punctulatis, tarsis brevibus; pedibus paris 3tii inæquis, articulo sinistro penultimo extus planiusculo et superne subacuto. Pedes colore non lineati.

*Long.* ¾''. *Hab.* ad insulas "Madeira," et "St. Jago" archipelagi "Cape Verde."

PAGURUS ZEBRA.—*P. æquabili* fronte manibus hirsutis subæquis depressis oculisque similis. Oculi margine carapacis antico non breviores, basin antennarum externarum longitudine æquant, aciculo duplo longiores. Pedes antici parvi, dextro paulo majore, manu duplo longiore quam latitudo, crasse granulata aut minute tuberculata, hirsuta, carpo non depresso, dextro parce tuberculato. Pedes 2di 3tii leviter hirsuti, colore pauci-lineati, subtiliter sparsim granulati, tarsis brevibus, articulo penultimo pedis sinistri paris 3tii supra non spinuloso.

*Long.* ¾''. *Hab.* ad insulas "Sandwich."

PAGURUS GLOBOSO-MANUS.—*P. æquabili* manibus subæquis, digitis, formâ frontis affinis. Frons medio latius acutus. Oculi margine antico carapacis parce longiores, basi antennarum externarum vix longiores. Pedes antici breves, manu globulosâ, non duplo longiore quam latitudo, supra infraque minute tuberculato-spinosâ, breviter hirsutâ. Pedes sequentes fere nudi, articulo 3tio subtiliter verrucoso, penultimo pedis sinistri paris 3tii extus plano et hirsuto, paris 2di nudo, paucis spinulis minutis armato. Pedes colore non lineati.

*Long.* 1½''. *Hab.* ad insulas "Viti."

PAGURUS HUMILIS.—*P. æquabili* fronte manibus parvis subæquis affinis. Oculi breviores, crassiusculi, fronte non longiores; squamâ basali triangulatâ. Pedes primi parvi, manu dextrâ parce majore, pubescente, oblongâ, paulo compressâ, margine superno rotundata. Pedes 4 sequentes crassiusculi, subteretes, sparsim pubescentes, tarso tenui, terete, brevior quam articulus penultimus. Pedes colore non lineati.

*Long.* 1''. *Hab.* ad insulas "Viti" et "Tongatabu."

#### GENUS PAGURISTES.

PAGURISTES LONGIROSTRIS.—Rostrum anguste elongatum, acutum, integrum, carapacis regio antica subcordata, fere nuda. Oculi graciles, margine carapacis antico longiores, vel basi vel aciculo antennarum externarum vel basi internarum multo longiores; squamâ basali medio acutâ. Flagellum antennarum externarum nudiusculum. Pedes antici æqui, manu carpoque depressis, latis, bene areolatis, non scabriculis, manu infra partim villosâ. Pedes 4 sequentes intus areolati supra hirsuti, extus fere læves et nudi.

*Long.* 1½''. *Hab.* in mari Indiæ orientalis.

*PAGURISTUS HIRTUS*.—Rostrum brevissimum. Carapax plerumque hirtus. Oculi graciles margine carapacis antico non breviores, basi vel aciculo antenarum externarum multo longiores, basi internarum breviores, squamâ basali valde elongatâ, angustâ, margine externo arcuato et tenuiter bene denticulato. Flagellum antennarum externarum infra elongate ciliatum. Pedes 2di 3tii hirti crassiusculi.

*Long.* 2". *Hab.* in mari Sinensi.

#### GENUS CENOBITA.

*CENOBITA CARNESCENS*.—Regio carapacis antica plana, scabricula, lateribus quoque plana. Oculi fronte longiores, plus duplo longiores quam altitudo, valde compressi, squamâ basali triangulatâ, acutâ. Pedes antici inæqui, sinistro majore, superficiem granuloso, carpo paulo brevior quam manus, brachio apicem oblique plano-truncato. Pedes quatuor sequentes fere nudi, parce pubescentes, articulo ultimo scabriculo.

*Long.*  $1\frac{1}{4}$ — $1\frac{1}{2}$ ". *Hab.* in archipelago "Paumotu."

*CENOBITA BRUNNEA*.—Regio carapacis convexa, nuda. Oculi fronte paulo breviores. Pedes antici validi, paulo inæqui, manu carpoque hirsutis, manu spinulis minutis sparsis scabriculâ, brachio apicem rotundato. Pedes 4 sequentes hirsuti, articulo ultimo subterete, longiore quam penultimus.

*Long.* 3". *Hab.* ad insulam "Upolu" Samoensem. Abdomen nuce myristico sæpe tectum.

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The Committee to which was referred Dr. J. C. Fisher's description of a new species of Cicada, with Mr. Cassin's Notes on the same and on *C. septendecim*, reported in favor of publication in the Proceedings.

#### *On a new species of Cicada.*

By J. C. FISHER, M. D.

In the course of the observations made by the Committee of this Academy, to which was assigned the duty of investigating the habits and history of the seventeen-year Locust, *Cicada septendecim*, which appeared during the present year (1851) in the neighborhood of Philadelphia, the attention of its members was directed by Mr. John Cassin to the fact that two species had been confounded, and that the insect regarded as the smaller variety was in fact a distinct species, a conclusion at which he had arrived during their previous appearance in 1834. It is much smaller, is blacker in color, especially on the lower surface of the abdomen, where also the segments are bordered more narrowly with yellow, and has a note *entirely different* from that of the larger *Cicada septendecim*, Linn. Syst. Nat. i., pt. ii., p. 708, (1767).

The two species did not associate together, but were found mostly on separate trees, the smaller being the less abundant.

I propose on these grounds to characterize the smaller species as follows:—

*Cicada Cassinii*, nobis. ♂ total length of body, 9-10ths of an inch; of the wings, 1 2-10ths inches; ♀ frequently smaller.

Colors and general appearance much like those of *Cicada septendecim*, Linn.,



but darker, and the segments of the abdomen below are more narrowly bordered with yellow. Note different to that of *C. septendecim*, and more like that of some of the grasshoppers. Inhabits the neighborhood of Philadelphia, appearing in the winged or perfect state at intervals of seventeen years.

*Note on the above species of CICADA, and on the CICADA SEPTENDECIM, Linn.*

BY JOHN CASSIN.

There are two distinct and easily recognized species of *Cicada* which appear at intervals of seventeen years, and both of which were observed in this neighborhood, especially in the woods at Powelton, during the present year. I saw them in Delaware county, Pennsylvania, in 1834, and their entire specific distinctness I have insisted on through good and evil report for the last seventeen years.

It was therefore highly gratifying to me to have an opportunity of calling the attention of the gentlemen of this Academy to the smaller species which Professor Fisher has done me the honor of naming as above, and particularly to its note. This is quite different from the prolonged and loud scream of the larger species, (which is *C. septendecim*, Linn.) and begins with an introductory *clip, clip*, quite peculiar. No disposition to associate with each other exists between the two species, and although I have seen both on the same tree, yet most frequently they were entirely separated, and occupied different parts of the woods. In 1834, I observed the smaller species in localities which were somewhat favorably situated for moisture, but during the present year it occurred in localities as varied as those of the other and larger species. At Powelton it was very abundant in an orchard of apple trees on the most elevated part of the estate, and also on trees in the adjacent woods.

That the smaller species preferred low grounds was the observation of Dr. Hildreth, of Marietta, Ohio, who, in an article on the *Cicada septendecim*, in *Silliman's Journal*, xviii. p. 47, (1830) has the following paragraph:—"There appeared to be two varieties of the *Cicada*, one smaller than the other; there was also a striking difference in their notes. The smaller variety was more common in the bottom lands and the larger in the hills."

The size and the peculiar note are the most striking characters of the smaller species, otherwise it much resembles the larger. The consideration of its claims to specific distinction involves the general problem of specific character, which is difficult in theory, but practically is readily solved. An animal which constantly perpetuates its kind, or in other words reproduces itself either exactly or within a demonstrable range of variation, is a species. These two *Cicadæ* do not associate together as varieties commonly do. Of the very numerous instances in which the phenomenon introductory to propagation has been observed this year, in the course of the particular attention paid to these insects by gentlemen of this Academy, not one case occurred in which the male and female of the two insects were seen together. They are distinct species.

The appearance of the *Cicada septendecim* in various localities at different periods, each terminating intervals of seventeen years, for instance in Ohio in 1846 and in Eastern Pennsylvania in 1851, is a matter of remarkable interest. Many independent ranges or provinces are known to exist in the United States, and they are now ascertained to be so numerous that this species probably ap-

pears in some part of the country every year. Assuming all that part of North America in which it has ever been observed to be its zoological province, how are the sub-provinces and different times of appearance to be accounted for? Are all those sub-provinces to be regarded as the theatres of independent creations? Do the facts demonstrate that the same species may exist in provinces which may be presumed to have had different eras of origin?

It would be a curious fact, and one of important application, that exactly the same species can inhabit provinces having independent creations, and if, too, as in the case of this insect, it should be clearly impossible for it to have extended from one province to another.

Or, can it be possible that every distinct district in which the *Cicada* appear is really an entomological province, and that entomological provinces in this part of North America are quite restricted in extent, as has been observed by Dr. Le Conte in California? (Communicated by that gentleman to the American Association for the advancement of Science at its meeting in August, 1851.)

Those sub-provinces may have relations to geologic changes. Having the extraordinary characteristic necessity of remaining in the earth for seventeen years, as a fact in the history of this insect, may it be possible to infer that geologic changes have effected the difference in the times of its appearance, or that so short periods as fractions of seventeen years have been of geologic importance throughout the range of the *Cicada*?

The *Cicada septendecim* has appeared in the vicinity of Philadelphia, at intervals of seventeen years, certainly since 1715. There has been, it appears, no variation of temperature, nor causes accidental nor other since that date sufficient to affect its habits in any perceptible degree. It is stated in Clay's Swedish Annals, to have appeared in May, 1715, in this neighborhood, (which, so far as I know, is the earliest authentic record;) punctually in the same month, every seventeenth year, now certainly for nearly one hundred and fifty years, has this extraordinary insect been known to make its visit. No causes have affected it during that period, not even so far as relates to the month in which it appears.

Passing, I would observe that so far as relates to the neighborhood of Philadelphia, the *Cicada septendecim* clearly had not a fair start with the year 1,—anno mundi of the commonly received chronology. If it had had, the sum produced by  $1851 \times 4004 - 1$  ought to divide by 17 without a remainder, which it will not do,—more insignificant facts than which have troubled schoolmen.

I have never seen any animals more entirely stupid than the seventeen year Locusts. They make no effort to escape, but allow themselves to be captured with perfect passiveness, thus reminding one of the tameness of animals in countries where they are not molested by enemies. All animals of as high grade of organization as these insects, acquire instincts from impressions made by the presence of danger and otherwise, which they transmit to their offspring. The young Fox of to-day is undoubtedly superior to his juvenile progenitor of a century since. The *cicadae* have acquired no such instinct. Their short life of maturity above the surface of the earth does not appear to be of sufficient duration for such to be formed and impressed on their posterity.

In short, it appears to me that the study of these insects, and the examination of their separate ranges, might result in conclusions of extraordinary importance, especially relative to modern views of the distribution of animals.

No animal is more easily traced. In other aspects, too, they present interesting points for study, perhaps of general interest in zoological science.

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Dr. Zantzinger offered the following, which was adopted.

*Resolved*, That a member of the Society be appointed to prepare a new and extended "Notice of the Academy," to be read before the Society, and designed for publication.

The Chairman, on motion being authorized to make the appointment, selected Dr. Ruschenberger, who accepted the same.

#### ELECTION.

The Rev. Lorenzo L. Langstroth, of Philadelphia, was elected a *Member* of the Academy.

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*October 7th.*

Vice President BRIDGES in the Chair.

Dr. Leidy read a paper intended for publication in the Proceedings, entitled "Corrections and Additions to former papers on Helminthology, published in the Proceedings of the Academy of Natural Sciences of Philadelphia," which was referred to Dr. Zantzinger, Dr. Fisher, and Dr. Watson.

A letter was read from the Secretary of the Geological Society of London, dated May 1st, 1851, acknowledging the receipt of recent numbers of the Proceedings.

Dr. Leidy remarked, the members probably recollected that a few evenings since he had mentioned, that it had been asserted by numerous and good authorities, that Gordii had been observed within the body of insects. He now exhibited a specimen of a Gordius and a grasshopper, preserved in a bottle of alcohol, which had been sent to him by his friend Dr. Budd, of Pemberton, New Jersey. The Gordius, Dr. Budd stated, was seen to come out of the body of the grasshopper, and in a half an hour afterwards died. It is a different species from those described a short time since. It is a female, about six inches long, by half a line in length, rigid, strongly marked by transverse wrinkles, and annuli, with the caudal extremity somewhat compressed and obtuse. To the species he gave the name Gordius robustus.

He also exhibited a species of Mermis from Brazil, belonging to the collection of the Academy. It is fourteen and a half inches long, and of a reddish brown color. To it he gave the name Mermis ferruginea.

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*October 14th.*

Vice President BRIDGES in the Chair.

Mr. Cassin read a paper entitled "Catalogue of the Caprimulgidæ in the collection of the Academy of Natural Sciences of Philadelphia,"

## ERRATA IN VOL. V.

- Page 14, line 16 from bottom, for *Zeuker* read *Zenker*.  
 " 22, " 10 " top, for *February* read *August*.  
 " 55, " 23, " bottom, for *Plumus* read *Plumos*.  
 " 117, " 16 " " for *Vol. 5* read *Vol. 4*.  
 " 154, " 12 " top, for *necessarily* read *unnecessarily*.  
 " 157, " 4 " bottom, for *Heidinger* read *Haidinger*.  
 " 169, " 10 " top, for *Dikaj* read *Dijak*.  
 " 209, " 7 " " for *isoseoles* read *isoscel-s*.  
 " 209, " 10 " " for *joints* read *points*.  
 " 210, " 5 " bottom, for *papulus* read *Passalus*.  
 " 210, " 4 " " for *gulus* read *Julus*.  
 " 212, " 21 " " for 8 read 13, and for 34 read 54.  
 " 224, " 10 and 11 from bottom, for *Aspidagaster* read *Aspidogaster*.  
 " 227, " 2 from bottom, insert John H. Brinton.  
 " 256, " 5 " " for *Sowerly* read *Sowerby*.  
 " 259, " 13 " " for *Statisque* read *Statistique*.  
 " 275, " 10 " top, for *Longstreth* read *Langstroth*.  
 " 276, " 19 " " for *robustum* read *priscum*.  
 " 276, " 23 " " for *i. ½* read *i. ¾*.  
 " 276, " 2 " bottom, before "by" insert "read."  
 " 295, " 8 " top, for *were* read *are*.  
 " 296, " 5 " " for *Silliquaria* read *Sigillaria*.  
 " 297, " 13 " " for *Ireland* read *Iceland*.  
 " 297, bottom line, for *Arctos* read *maritimus*.  
 " 301, line 21 from bottom, for *cinqe* read *cinque*.  
 " 345, top line, for *puncticollis* read *poricollis*.  
 " 357, line 21 from top, for *Coaco* read *Cocoa*.  
 " 357, " 11 " bottom, for *Borneo* read *Africa*.  
 " 357, bottom line, for *Fiuns* read *Finns*.